A Google Maps
Application for the
Connecticut Trust for
Historic Preservation's
Barn Survey



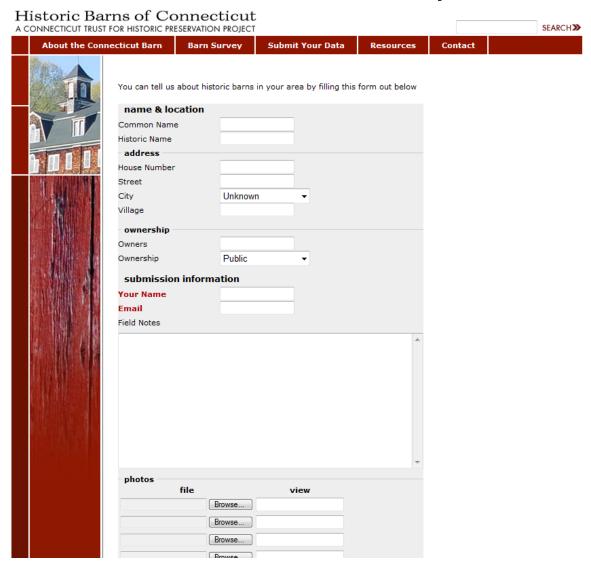


Dr. John Harmon, Professor Emeritus, CCSU Geography GIS Day Nov. 17, 2010

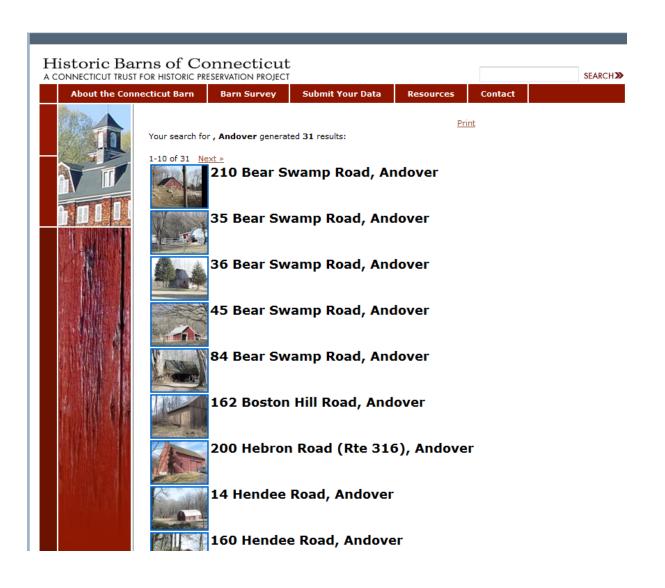
Field Data Collection



Web Data Entry

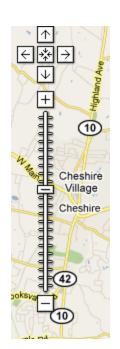


Town-Based List Interface



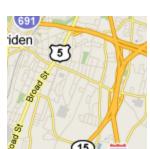
This Part is for the Techies

- Free Google Maps
 Application
 Programming Interface
 (API)
- Java-enable Hypertext Markup Language (HTML)
- Allows access to Google Maps cached maps and images to place your information on top of.



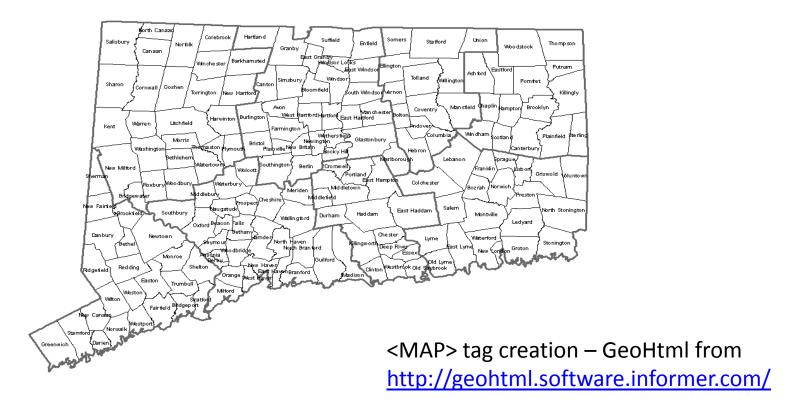








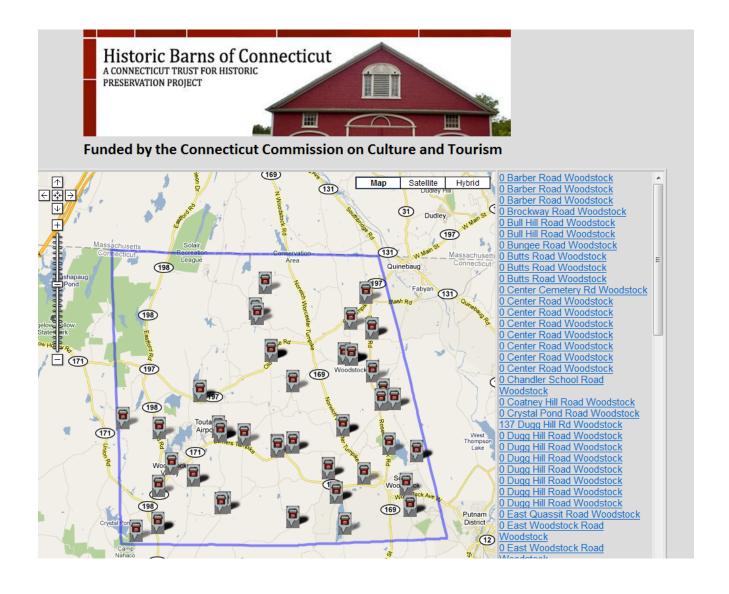
Entry through <MAP> Tag



<MAP NAME="WhiteGIFMap">

<AREA SHAPE="POLY" ID = "Woodstock" HREF = " http://gis1.students.ccsu.edu/CTTrustBarns/Woodstock.htm" ALT = "Woodstock Barns" COORDS="782,76, 846,72, 862,137, 787,140, 782,76">

Town Maps



Again for the Techies

Map and tools are pulled from a Google server, centered where you said it should be and zoomed to the level you set

> Finally it draws the outline of the town in blue using coordinates stored in an XML file in the folder.



The basic html page with a scrolling sidebar (some towns have lots of barns) and the CT Trust image is loaded into your browser

The Java script reads through a text file that contains all the information about each barn including its latitude and longitude. It places a marker at the right location and loads the side bar with the barns' locations sorted alphanumerically by address.

Access data page for the barn from the CT Trust's server

Individual Barns

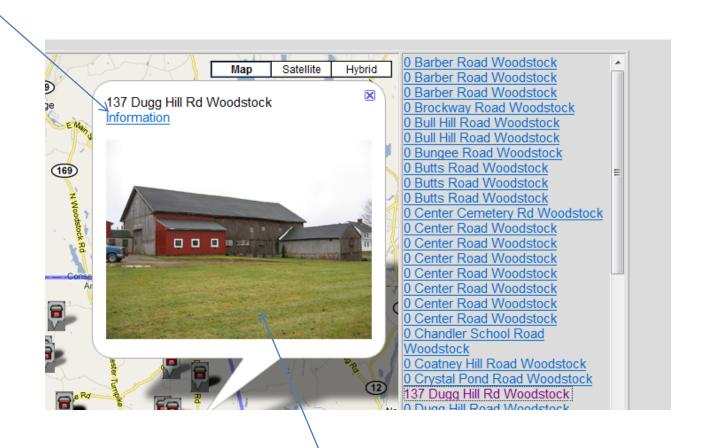
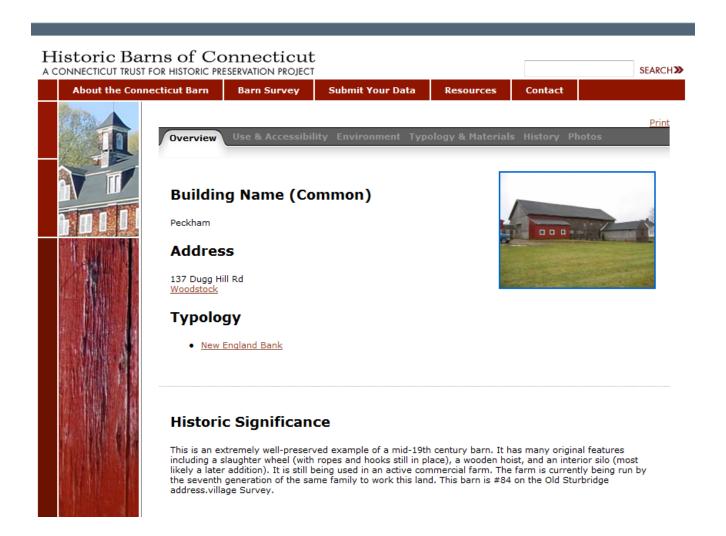


Image served from CT
Trust's server

Data Page from Trust's Server



Keeping it Current

- A text file data dump of the database
- Geocoding the barn addresses (determining latitude and longitude)
- Output is an Excel spreadsheet
- Python script reads through the spreadsheet and produces for each town:
 - A new text file containing all the barns that were located during geocoding around 80%)
 - A new html file containing the Java script and html needed for displaying the map
 - A new html file containing information about the barns that could not be located to be placed on the map.
- The entire set of 3*169 = 507 new files is written out with each update, replacing the old files.
- The XML containing the coordinates of the town's boundary does not change.

So you would like to do this yourself....

- You need a computer that is web-enabled, i.e. that other computers on the web
 can see and get data from
- You need to get your own Google Map API key will work for that folder and all sub-folders
 - http://code.google.com/apis/maps/signup.html
- Get the basic Java and Html code from this Google Maps tutorial site
 - http://econym.org.uk/gmap/
- Storing data in a text file (Example 15) is a LOT EASIER than storing and accessing through XML data (Example 3)